MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION,
MINISTRY OF EDUCATION AND SCIENCE OF THE KYRGYZ REPUBLIC

Government-run Educational Institution of Higher Professional Education
Kyrgyz-Russian Slavic University
School of Medicine

ENDORSED BY
the acting dean
Abilova S. S.

"23" 10 2025

Medical rehabilitation

Course Outline (Module)

Assigned to the **Department of Medical rehabilitation and family medicine**

Academic Curriculum 310501_21_45 gm.pli.xml
31.05.01. General medicine

Mode of Study **Intramural**
Total Credit Value **3 credit points**

Course Hours 108
including:
in-class learning 64
individual work 43,7

Scope of Testing Semesters:
exams
credits 11

Semester Academic year	11 (6.1)		Total	
Weeks	18			
Type of training	AC	CO	AC	CO
Lectures	16	16	16	16
Practical session	48	48	48	48
Contact work	0,3	0,3	0,3	0,3
Including Interactive Session	4	4	4	4
Total in – class Session	64	64	64	64
Face – to Face Learning	64,3	64,3	64,3	64,3
Individual Work	43,7	43,7	43,7	43,7
Total	108	108	108	108

The Course outline developed by:
CBS, docent Saralinova G. M.
Lecturer Buneeva Y. V.

Reviewers:

Candidate of Medical Sciences, Associate Professor, Head of the Department of Clinical Rehabilitation and Physiotherapy of KSMA, Smanova J. K.
Candidate of Medical Sciences, Assistant professor of KRSU, Dzhaylobaeva K.A.

The Course Outline
Medical rehabilitation

developed in full compliance with FSES 3+:

Federal State Education Standards of Higher Professional Education for students trained for specialty General medicine 31.05.01 (The Ministry of Education and Science of the Russian Order of "09" February 2016_№_95__)

in accordance with Academic Curriculum:
51.05.01 General medicine
confirmed by KRSU Board of Academics

The Course Outline endorsed by Medical rehabilitation Department Meeting

Record of 29.08. 2025 № 1
Valid for: 2025-2028 academic year
The Head of Department Candidate of Medical Sciences, assistant professor Saralinova G.M.

The course outline endorsed for the following academic year

Chairman of the Educational and Methodological Board
__ __________ 20__ y.

The course outline has been revised, considered and endorsed for implementation
in 2020-2021 Academic Year at the Staff Meeting of Medical rehabilitation Department

Record of 20 y. № 1
The Head of Department Saralinova G.M.

The course outline endorsed for the following academic year

Chairman of the Educational and Methodological Board
__ __________ 20__ y.

The course outline has been revised, considered and endorsed for implementation
in 2020-2021 Academic Year at the Staff Meeting of Medical rehabilitation Department

Record of 20 y. № 1
The Head of Department Saralinova G.M.

The course outline endorsed for the following academic year

Chairman of the Educational and Methodological Board
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The course outline has been revised, considered and endorsed for implementation
in 2020-2021 Academic Year at the Staff Meeting of Medical rehabilitation Department

Record of 20 y. № 1
The Head of Department Saralinova G.M.

The course outline endorsed for the following academic year

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Record of 20 y. № 1
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Record of 20 y. № 1
The Head of Department Saralinova G.M.

The course outline endorsed for the following academic year

Chairman of the Educational and Methodological Board
__ _____ 20__ y.

The course outline has been revised, considered and endorsed for implementation
in 2020-2021 Academic Year at the Staff Meeting of Medical rehabilitation Department

Record of 2.september 2020y. № 1
The Head of Department Saralinova G.M.

1. COURSE OUTLINE OBJECTIVES
1.1 Students gain knowledge about the main methods and means of medical rehabilitation, for their full use in the complex treatment and recovery of patients at all stages of rehabilitation (hospital - clinic - sanatorium) in order to restore the functional state of the body and increase efficiency.

2. PLACE OF THE COURSE IN THE EDUCATIONAL PROGRAM	
Educational Program Units:	B1.B
2.1	**Students' Preliminary Training Requirements:**
2.1.1	Hospital surgery
2.1.2	Faculty therapy
2.1.3	Physics mathematics
2.1.4	Obstetrics and gynecology
2.1.5	Traumatology, orthopedics
2.1.6	Neurology, medical genetics, neurosurgery
2.1.7	Faculty surgery
2.1.8	Pathophysiology, clinical pathophysiology
2.1.9	Pathological anatomy
2.1.10	Biochemistry
2.1.11	Normal physiology
2.1.12	Anatomy
2.1.13	Oncology, radiation therapy
2.2	**Course Units and Practical Sessions imposing the prior Proficiency**
	Knowledge of this discipline will help the student navigate the use of non-drug methods of treatment in therapeutic practice and when passing the interdisciplinary state exam.

3. STUDENTS' COMPETENCIES RESULTING FROM THE COURCE UNIT (MODULE)
PC-5: The ability to identify the main pathological conditions, symptoms, disease syndromes, and nosological

forms in patients in accordance with the International Classification of Diseases and Health Problems, 10th revision.	
Knowledge:	
Level 1	- methods and means of medical rehabilitation and spa treatment, the mechanism of their therapeutic action, indications and contraindications for prescription in patients with various diseases
Level 2	- principles of building a complex of rehabilitation measures for patients with various diseases
Skills:	
	- compose rehabilitation complexes for patients of various profiles
Expertise:	
	- the skills of prescribing the necessary rehabilitation complexes, taking into account the form, stage and phase of the disease

PC-13: Ready to determine the need for the use of natural therapeutic factors, pharmacological and non-drug therapies, and other methods for patients requiring medical rehabilitation and resort treatment.	
Knowledge:	
	- methods and means of medical rehabilitation and spa treatment, the mechanism of their therapeutic action, indications and contraindications for prescription in patients with various diseases
Skills:	
	- to determine indications and contraindications for each non-drug treatment method, to give specific recommendations for their practical use
Expertise:	
	- the skills of prescribing non-drug methods of treatment for patients of various profiles

Final Students' Competences

3.1	**Knowledge:**
3.1.1	General foundations of medical rehabilitation.
3.1.2	Methods and means of medical rehabilitation.
3.1.3	Natural and preformed factors in the system of treatment, rehabilitation and preventive measures.
3.1.4	The mechanism of the therapeutic action of physical factors on the body.
3.1.5	The main spa factors and the principles of selection and treatment of patients in the resorts.
3.1.6	The mechanism of action of physical exercises and massage on the body of healthy and sick.
3.1.7	The main means and forms of physical therapy, the characteristic features of exercise therapy and massage.
3.1.8	Recommendations for choosing the optimal motor mode.
3.1.9	Basic rules for the use of physiotherapy exercises and massage in the complex rehabilitation of patients.
3.1.10	Special exercises for various diseases of the internal organs.
3.1.11	Traditional recovery methods (acupuncture, surface reflexology, auriculotherapy, etc.)
3.1.12	Fundamentals of naturopathy.
3.1.13	The use of various rehabilitation methods for the most common diseases and injuries of the body.
3.1.14	Indications and contraindications for the appointment of methods and means of medical rehabilitation.
3.1.15	Methods for assessing the effectiveness of ongoing rehabilitation measures.
3.2	**Skills:**
3.2.1	To use methods and means of rehabilitation for therapeutic and prophylactic purposes.
3.2.2	Determine indications and contraindications for each method of medical rehabilitation.
3.2.3	Compile a set of necessary rehabilitation measures for a specific patient.
3.2.4	Conduct a comprehensive medical examination in order to prescribe the necessary method of medical rehabilitation.
3.2.5	Determine the tasks of exercise therapy at the inpatient, outpatient and sanatorium-resort stages of rehabilitation of patients of various profiles.
3.2.6	Give specific recommendations for the practical use of a rational motor regime, various forms and means of physical culture.

3.2.7	Prescribe an adequate method of physiotherapy, taking into account the form, stage and phase of the disease.
3.2.8	Use traditional methods of recovery in the rehabilitation of sick and disabled people.
3.2.9	Correctly assess the tolerance, adequacy and effectiveness of the ongoing rehabilitation measures.
3.2.10	Choose the necessary sanatorium for carrying out rehabilitation measures for patients with various chronic pathologies.
3.3	**Expertise:**
3.3.1	The tactics of medical actions in the appointment of methods and means of rehabilitation in the complex therapy of the patient.
3.3.2	Skills in the design of a physiotherapeutic appointment and a health resort card.
3.3.3	Tactics of prescribing adequate physical activity and physiotherapy, taking into account the individual characteristics of the patient and the severity of the disease.
3.2.4	Skills of building a therapeutic complex of exercise therapy and assessing the adequacy of the physical activity of the patient's condition.
3.2.5	Skills of building a complex of rehabilitation measures at all stages of rehabilitation of patients.

4. COURSE (MODULE) STRUCTURE AND CONTENT							
Class Code	**Subject Name /Type of Class/**	**Semester / Academic Year**	**Hours**	**Competencies**	**Literature**	**Interactive Sessions**	**Notes**
	Section 1. General physiotherapy						
1.1	The subject and objectives of physiotherapy. Direct current and its medicinal use. / Lek /	11	2	PC-5 PC-13	L1.4 L2.1 L2.2 E2	0	
1.2	Alternating currents and impulse currents, the mechanism of therapeutic action / Lek /	11	2	PC-5 PC-13	1.4 L2.1 L2.2 E1	0	
1.3	Phototherapy. / Lek /	11	2	PC-5 PC-13	L1.4 L2.1 L2.2	0	
1.4	Thermal water therapy. / Lek /	11	2	PC-5 PC-13	L1.4 L2.1 L2.2	0	
1.5	Balneology and balneotherapy. Resorts of Kyrgyzstan. / Lek /	11	2	PC-5 PC-13	L1.4 L2.1 L2.2 E1	0	
1.6	Fundamentals of Medical Rehabilitation. Service organization. Basic methods and means of medical rehabilitation. /Prac/	11	3	PC-5 PC-13	L1.4 L2.1 L2.2 E3	0	
1.7	Fundamentals of General Physiotherapy. Direct current and its therapeutic use / Prac /	11	3	PC-5 PC-13	L1.4 L2.1 L2.2 E1 E5	0	
1.8	Characteristics of alternating currents and electromagnetic paths. Mechanism of action and therapeutic use. /prac/	11	3	PC-5 PC-13	L1.4 L2.1 L2.2 E1 E2 E3	0	
1.9	Impulse currents and their therapeutic use. Ultrasound therapy. Phonophoresis. / Prac	11	3	PC-5 PC-13	L1.4 L2.1 L2.2 E2 E5	0	
1.10	Phototherapy. Physical characteristic of the luminous flux. The mechanism of action of the light flux. Laser therapy.	11	3	PC-5 PC-13	L1.4 L2.1 L2.2 L2.3	0	

	/Prac/						
1.11	Thermal water therapy. The concept of heat treatment procedures. Physical characterization and therapeutic use. /Prac/	11	3	PC-5 PC-13	L 1.2 L.2.3 L2.3 E1 E5	0	
1.12	Balneology and balneotherapy. Therapeutic spa factors. Resorts of Kyrgyzstan. /Prac/	11	3	PC-5 PC-13	L1.4 L2.1 L2.2 E1 E4	0	Familiarization and filling out of the spa card.
1.13	Physical methods in the treatment and rehabilitation of patients with diseases of internal organs, musculoskeletal system, nervous system. /IW/	11	6	PC-5 PC-13	L1.3 L2 L2.1 E1 E2 E4	0	Working with additional literature. Physiotherapist medical appointment
1.14	Fundamentals of rehabilitation assistance to disabled people. /IW/	11	3	PC-5 PC-13	L1.2 E1	0	Working with additional literature
	Section 2. Traditional methods of rehabilitation						
2.1	Basic principals of oriental medicine and acupuncture / Lek /	11	2	PC-5 PC-13	L1.4 L2.2 L2.9 L2.10 L2.11 E1	0	
2.2	Reflex methods of medical rehabilitation. /Prac/	11	3	PC-5 PC-13	L1.4 L2.2 E1	0	
2.3	Non-drug methods of medical rehabilitation. /Etc/	11	3	PC-5 PC-13	L1.4 L2.2 L2.3 E1	0	
2.4	Fundamentals of oriental medicine (Yin-Yang theory, theory of five elements). /IW/	11	3	PC-5 PC-13	L1.4 L2.2 L2.4 E1	0	Search and research work with Internet resources. Discussion, preparation of presentations, reports.
2.5	Reflexology. /IW/	11	3	PC-5 PC-13	L1.4 L2.1 E1	0	Search and research work with Internet resources. Discussion, preparation of presentations, reports.
2.6	Naturopathy. /IW/	11	3	PC-5 PC-13	L1.4 L2.3 L2.1 E1	0	Search and research work with Internet resources. Discussion,

							preparation of presentations, reports.
2.7	Modern non-drug methods of treatment and rehabilitation. /IW/	11	3	PC-5 PC-13	L1.4 L2.3L2.4 L2.1 E1	0	Search and research work with Internet resources. Discussion, preparation of presentations, reports.
	Section 3. Basics of exercise therapy and physiotherapy exercises for diseases						
3.1	General bases, means and forms of exercise therapy. / Lek /	11	2	PC-5 PC-13	L1.1 L1.4 L2.3 E1	0	
3.2	Medical rehabilitation for cardiovascular diseases: exercise therapy, physiotherapy, massage, traditional medicine / Lek /	11	2	PC-5 PC-13	L1.4 L2.1 L2.2 E1	0	
3.3	Medical rehabilitation for diseases of the respiratory system: exercise therapy, physiotherapy, massage, traditional medicine / Lek /	11	2	PC-5 PC-13	L1.4 L2.1 L2.3	0	
3.4	General principles of exercise therapy. Characteristic. Fixed assets of exercise therapy, classification of physical exercises. /Prac/	11	3	PC-5 PC-13	L1.1 L1.4 L2.3 E1	0	
3.5	The main forms of exercise therapy and their characteristics. The procedure of therapeutic gymnastics, methods of its implementation. /Prac	11	3	PC-5 PC-13	L1.1 L1.4 L2.3 E1	0	
3.6	Physical therapy and other non-drug methods in medical rehabilitation of patients with cardiovascular diseases. /Prac/	11	3	PC-5 PC-13	L1.1 L1.4 L2.3 E1	0	Written homework. Drawing up a complex of medical gymnastics.
3.7	Physical therapy exercises and other non-drug methods in medical rehabilitation of patients with bronchopulmonary diseases. /Prac	11	3	PC-5 PC-13	L1.1 L1.4 L2.3 E1	0	Written homework. Drawing up a complex of medical gymnastics.
3.8	Physical therapy and other non-drug methods in medical rehabilitation of patients with diseases of the digestive system and metabolism. /Prac/	11	3	PC-5 PC-13	L1.2 L1.1 L1.4 E1	0	Written homework. Drawing up a complex of medical gymnastics.
3.9	Physical therapy and other non-drug methods in medical	11	3	PC-5 PC-13	L1.1 L1.3 L1.4 L2.3	0	Written homework.

	rehabilitation of patients with diseases and injuries of the musculoskeletal system. /Prac/				E1		Drawing up a complex of medical gymnastics.
3.10	Physical therapy exercises and other non-drug methods in obstetrics and gynecology. /Prac/	11	3	PC-5 PC-13	L1.1 L1.4 L2.3 E1	0	Written homework. Drawing up a complex of medical gymnastics.
3.11	Physical therapy and other non-drug methods in surgery. /Prac/	11	3	PC-5 PC-13	L1.1 L1.4 L2.3 L2.3 L2.4 E5	0	Written homework. Drawing up a complex of medical gymnastics.
3.12	Physical therapy and other non-drug methods in neurology. /Prac/	11	3	PC-5 PC-13	L1.1 L1.4 L2.3 L2.6 E1 E3	0	Written homework. Drawing up a complex of medical gymnastics.
3.13	Medical rehabilitation in urology. /IW/	11	4	PC-5 PC-13	L1.4 L2.1 L2.2 L2.5 E1 E3 E4	0	Elements of research work of students. Discussions, abstracts. Business games.
3.14	Medical rehabilitation of patients with tuberculosis. /IW/	11	4	PC-5 PC-13	L1.1 L1.4 L2.1 L2.3 E1 E3 E4	0	Elements of research work of students. Discussions, abstracts. Business games.
3/15	Medical rehabilitation of patients after infectious diseases. /IW/	11	4	PC-5 PC-13	L1.1 L1.4 L2.2 L2.5 L2.6 E1 E2 E3	0	Elements of research work of students. Discussions, abstracts. Business games.
3.16	Healing nutrition in medical rehabilitation programs. /IW/	11	3	PC-5 PC-13	L1.4 L2.3 L2.5 L2.4 E2 E3 E4	0	Working with additional literature

5. ASSESSMENT FUND
5.1. Advancement Questions and Assignments
Questions to check the level of training KNOWLEDGE 1. Rehabilitation. Definition, goals and objectives. 2. Medical rehabilitation. Principles and stages of medical rehabilitation. 3. Aspects of medical rehabilitation.

4. Fixed assets and forms of rehabilitation
5. Evaluation of the effectiveness of rehabilitation measures.
6. Physiotherapy. Definition, benefits, contraindications.
7. Galvanization. Characteristics of the factor. Mechanism of action. Indications and contraindications.
8. Medicinal electrophoresis, the advantages of electrophoresis.
9. Alternating currents and EMF, classification.
10. Darsonvalization, characteristic of the factor, mechanism of action. Indications and contraindications.
11. Inductothermy, characteristics of the method, mechanism of therapeutic action. Indications and contraindications.
12. UHF therapy, characteristics. The mechanism of the therapeutic action. Indications and contraindications.
13. Centimeter wave therapy. Characteristics of the factor, its disadvantages. Indications and contraindications.
14. Decimetwave therapy, characteristic of the factor. Benefits of Decimetre wave therapy. Indications and contraindications.
15. Impulse currents, their characteristics and advantages. Classification of impulse currents, mechanism of action.
16. Electrosleep, its characteristics. The mechanism of action of electrosleep. Devices, indications and contraindications.
17. Diadynamic therapy. Description of DDT currents. The mechanism of the therapeutic action. Devices, indications and contraindications.
18. Amplipulse therapy. Description of the method, mechanism of therapeutic action. Devices, indications and contraindications.
19. Ultrasound therapy, ultrasound characteristics. Mechanism of action. Devices, indications and contraindications.
20. Phototherapy. Characteristics of the light spectrum.
21. Infrared and visible rays. Characteristic. The mechanism of action on the body.
22. Ultraviolet radiation, its characteristics, parts of the UV spectrum. The mechanism of action on the body.
23. Hydrotherapy. Hydro and balneotherapy. The mechanism of the therapeutic action.
24. Types of hydrotherapy procedures. Characteristics.
25. Heat therapy. Types, characteristics. The mechanism of therapeutic action. Mineral baths, types, mechanism of action on the body. Indications and contraindications.
26. Resorts, the main resort factors. Classification of resorts.
27. Resorts of Kyrgyzstan, their features.
28. Traditional methods of treatment. Types, features.
29. The use of non-drug methods at various stages of medical rehabilitation of patients.
30. Determination of the method of physiotherapy exercises, the role and place in the complex treatment and rehabilitation of patients.
31. Fixed assets of exercise therapy, their characteristics.
32. Classification of physical exercises used in exercise therapy.
33. The main characteristic features of the method of physiotherapy exercises.
34. Forms of exercise therapy used in the complex rehabilitation of patients.
35. The procedure of therapeutic gymnastics, methods of its implementation in various medical and preventive and sanatorium-resort institutions.
36. Methods of dosage of physical activity in the PE procedure, sections of thePE lesson.
37. The periods of the treatment course in exercise therapy, their tasks and features.
38. Non-gymnastic forms of physiotherapy exercises, their types and characteristics.
39. Mechanisms of the therapeutic effect of physical exercises on the patient's body.
40. Movement modes in the treatment process. Their characteristics in a hospital and sanatorium institutions.
41. Evaluation of the effectiveness of exercise therapy for various diseases.
42. General contraindications to the appointment of exercise therapy.
43. Exercise therapy for diseases of the cardiovascular system.
44. Exercise therapy for respiratory diseases.
45. Exercise therapy for diseases of the digestive system.
46. Exercise therapy for metabolic diseases.
47. Exercise therapy for diseases and injuries of the musculoskeletal system.
48. Exercise therapy in obstetrics and gynecology.
49. Exercise therapy for diseases of the central and peripheral system.
50. Exercise therapy in orthopedics and traumatology.
51. Non-drug methods in the complex treatment and rehabilitation of patients with acute and chronic nonspecific respiratory diseases.

52. Non-drug methods in the complex treatment and rehabilitation of patients with bronchial asthma.
53. Non-drug methods in the complex treatment of patients with acute myocardial infarction.
54. Non-drug methods for coronary heart disease, exertional angina. Differentiated prescription of exercise therapy depending on the functional class of the patient.
55. Non-drug methods in the complex treatment and rehabilitation of patients with hypertension.
56. Non-drug methods in the complex treatment and rehabilitation of patients with gastric ulcer and 12 duodenal ulcer.
57. Non-drug methods of treatment of patients with chronic cholecystitis.
58. Non-drug methods in the complex treatment of patients with diseases of the spine (osteochondrosis of the spine, scoliotic disease).
59. Non-drug methods of treatment for diseases and injuries of the joints. Features of the use of exercise therapy for rheumatoid arthritis and deforming osteoarthritis.
60. Non-drug methods of treatment in the rehabilitation of patients with metabolic disorders (diabetes mellitus, obesity).
61. Non-drug methods of treatment in preparing pregnant women for childbirth, during pregnancy, in the postpartum period.
62. Non-drug methods in the treatment and rehabilitation of patients with gynecological diseases.
63. Non-drug methods of treatment and rehabilitation of patients with anomalies in the position of the uterus.
64. Non-drug methods of treatment in the pre- and postoperative periods during operations on the organs of the chest.
65. Non-drug methods of treatment in the pre- and postoperative periods during operations on the abdominal organs.
66. Non-drug methods of treatment in the rehabilitation of patients with cerebrovascular accidents.
67. Non-drug methods of treatment in the rehabilitation of patients with the peripheral nervous system.

Questions to check the level of proficiency Skills and Expertise:

To issue and justify the appointment of procedures for electrotherapy, ultrasound therapy, light, water, heat therapy, to determine the indications and contraindications for the resort and exercise therapy for the indicated diseases. Create a rehabilitation complex.

1. Acute pneumonia.
2. Deforming osteoarthritis of the right knee joint.
3. Bronchial asthma, moderate course, remission phase.
4. Chronic sinusitis.
5. Chronic obstructive bronchitis in the phase of incomplete remission.
6. Chronic gastritis with preserved secretory function.
7. Coronary heart disease, 1-2 FC.
8. Chronic lumbosacral radiculitis.
9. Hypertension 2 tbsp.
10. Chronic atonic colitis.
11. Cerebral atherosclerosis.
12. Chronic cholecystitis in the phase of incomplete remission.
13. Peptic ulcer of the duodenum in the phase of damping exacerbation.
14. Diabetes mellitus.
15. Chronic pyelonephritis without exacerbation.
16. Chronic tonsillitis.
17. Rheumatoid arthritis, articular form, minimal activity.
18. Obesity II Art.
19. Chronic cystitis.
20. Neuralgia of the trigeminal nerve.
21. Conditions after the transferred AMI.
22. Conditions after a stroke.
21. Consequences of traumatic brain injury with hypertensive syndrome.
22. Osteochondrosis of the cervical spine.
23. Hypotonic neurocirculatory dystonia.
24. Adhesions in the pelvic area.

Control tasks to check the level of training Skills and Expertise in ANNEIX 1

5.2. Course Papers Themes

Coursework is not required by the curriculum.

5.3. Assessment Fund

Questions and tasks for current control in paragraph 5.1
Test questions for differential credit:
1. Physiotherapy as a science and its objectives.
2. General contraindications for the use of physical factors.
3. Galvanization. Characteristics of the factor. The mechanism of the therapeutic action. Indications and contraindications for use.
3. Medicinal electrophoresis, its essence. The benefits of electrophoresis. The mechanism of the therapeutic action. Indications and contraindications for the appointment.
4. Methods of galvanization and drug electrophoresis: local, segmental-reflex, general. Technique of procedures, therapeutic use.
5. Alternating currents and EMF, classification. The mechanism of the therapeutic action.
6. Darsonvalization, characteristic of the factor. Mechanism of action, therapeutic use. Apparatus, procedures. Indications and contraindications for the appointment.
7. Inductothermy, characteristic of the method, mechanism of therapeutic action. Apparatuses. Methods of procedures. Indications and contraindications for the appointment.
8. UHF therapy, characteristics. The mechanism of the therapeutic action. Equipment, procedures, dosage. Indications and contraindications for the appointment. Disadvantages of UHF therapy.
9. Centimeter wave therapy. Characteristics of the factor, its disadvantages. The mechanism of the therapeutic action. Equipment, methods and dosage of procedures. Indications and contraindications for the appointment.
10. Decimetwave therapy, characteristic of the factor. Benefits of UHF therapy. The mechanism of the therapeutic action. Apparatus, procedures. Indications and contraindications.
11. Impulse currents, their characteristics and advantages. Classification of impulse currents, mechanism of action.
12. Electrosleep, its characteristics. The mechanism of action of electrosleep. Medicinal use. Apparatus, procedures, dosage. Indications and contraindications for the appointment of electrosleep. Advantages of electrosleep over medication.
13. Diadynamic therapy. Description of DDT currents. The mechanism of the therapeutic action. Apparatus, procedures, dosage. Indications and contraindications for the appointment.
14. Amplipulse therapy. Description of the method, mechanism of therapeutic action. The dependence of the therapeutic effect on the frequency and depth of modulations. Apparatus, procedures. Indications and contraindications for the appointment.
15. Ultrasound therapy, ultrasound characteristics. Mechanism of action. Medicinal use. Ultraphonophoresis. Apparatus, procedures. Indications and contraindications for the appointment.
16. Phototherapy. Characteristics of the optical range, part of the spectrum.
17. Infrared and visible rays. Characteristic. The mechanism of action on the body. Medicinal use. Irradiators. Irradiation techniques. Indications and contraindications for the appointment.
18. Ultraviolet radiation, its characteristics, parts of the UV - spectrum. The mechanism of action on the body.
19. Dosage of UV - rays. Determination of the biodose. General UV, schemes. Indications and contraindications for general UV.
20. Local ultraviolet irradiation. Medicinal use. UV irradiators. Local irradiation techniques. Indications and contraindications.
21. Hydro and balneotherapy. Classification of hydrotherapy procedures. The mechanism of action on the body.
22. Healing showers. They are classified according to temperature and pressure. Techniques. Indications and contraindications for the appointment.
23. Mineral baths. Their characteristics, methods of release of procedures. Therapeutic action. Indications and contraindications for the appointment.
24. Gas baths, their characteristics and features of the therapeutic effect on the body, (carbon dioxide, oxygen, nitrogen, pearl). Techniques for the release of procedures. Indications and contraindications for use.
25. Radon baths. The main driving factor. The mechanism of action on the body. Techniques for carrying out artificial radon baths. Indications and contraindications for the appointment.
26. Mud therapy. Characteristics and classification of therapeutic mud. The mechanism of the therapeutic action. The main deposits of therapeutic mud in Kyrgyzstan.
27. Methods of mud therapy. Indications and contraindications for the appointment.
28. Paraffin and ozokerit therapy. Characteristics of factors. The mechanism of the therapeutic action.

Techniques for the release of procedures. Indications and contraindications for the appointment.
29. Resorts, the main resort factors. Classification of resorts. General contraindications for referral to spa treatment. Sanatorium-resort cards, their design.
30. Resorts of Kyrgyzstan, their features. Climatotherapy, balneotherapy, mud therapy at the resorts.
31. Cholpon-Ata resort. Its characteristic. Indications and contraindications for referring patients.
32. Resort Issyk-Ata. Its characteristic. Indications and contraindications for referring patients.
33. Resort Jalal-Abad. Its healing factors. Indications and contraindications for referring patients.
34. Resort Jeti-Oguz, its characteristics. Indications and contraindications for referring patients.
35. Sanatorium "Kyrgyzstan", its characteristics. Indications and contraindications for referring patients.
36. Acupuncture. The mechanism of the therapeutic action. Kinds. Indications and contraindications.
37. The place of reflexology in the rehabilitation of patients with various pathologies.
38. Herbal medicine and homeopathy. Description of the method. Therapeutic action. Indications and contraindications.
39. Apitherapy and hirudotherapy. Description of the method. Therapeutic action. Indications and contraindications.
40. Combination of non-drug methods with other methods of treatment.
41. Definition of medical rehabilitation. Organization of a rehabilitation service. Methods and means of medical rehabilitation.
42. Stages and aspects of medical rehabilitation.
43. Basic principles of medical rehabilitation.
44. Evidence-based medicine and rehabilitation.
45. Determination of the method of physiotherapy exercises, the role and place in complex treatment and rehabilitation.
46. Fixed assets of exercise therapy, their characteristics.
47. Classification of physical exercises used in exercise therapy.
48. The value and classification of breathing exercises used in physiotherapy exercises.
49. The procedure of therapeutic gymnastics, methods of its implementation in various medical and preventive and sanatorium-resort institutions.
50. Non-gymnastic forms of physiotherapy exercises, their types and characteristics.
51. Mechanisms of the therapeutic action of physical exercises on the patient's body.
52. Movement modes in the treatment process. Their characteristics in a hospital and sanatorium institutions.
53. General contraindications to the appointment of exercise therapy.
54. Physiotherapy and massage in the rehabilitation of patients with bronchial asthma.
55. Physiotherapy and massage in staged rehabilitation of patients with acute myocardial infarction.
56. The use of physiotherapy exercises and massage in the rehabilitation of patients with coronary heart disease.
57. The use of physiotherapy exercises and massage in the treatment and rehabilitation of patients with essential hypertension.
58. The use of physiotherapy exercises and massage for gastric ulcer and 12 duodenal ulcer.
59. The use of physiotherapy exercises and massage in the treatment and rehabilitation of patients with chronic cholecystitis.
60. Therapeutic exercise and massage for chronic colitis and splanchnoptosis.
61. The use of physiotherapy exercises and massage for osteochondrosis of the spine.
62. Physiotherapy and massage for scoliotic disease.
63. The use of physiotherapy exercises and massage for rheumatoid arthritis.
64. The use of physiotherapy exercises and massage for deforming osteoarthritis.
65. The use of exercise therapy and massage in the treatment and prevention of metabolic disorders (obesity, diabetes).
66. Physiotherapy in preparing pregnant women for childbirth.
67. Physiotherapy exercises and massage for inflammatory gynecological diseases and anomalies in the position of the uterus.
68. The use of exercise therapy for flat feet.
69. The use of physiotherapy exercises for rheumatism.
70. Medical rehabilitation of patients with acute pneumonia.
71. Medical rehabilitation of patients with bronchial asthma.
72. Medical rehabilitation of patients after acute myocardial infarction.
73. Medical rehabilitation of patients with coronary heart disease, depending on the functional class.
74. Medical rehabilitation of patients with essential hypertension.
75. Medical rehabilitation of patients with gastric ulcer and duodenal ulcer.
76. Medical rehabilitation of patients with chronic cholecystitis.

77. Medical rehabilitation of patients with osteochondrosis of the spine.
78. Medical rehabilitation of patients with rheumatoid arthritis and osteoarthritis deformans.
79. Medical rehabilitation of patients with obesity, taking into account the effectiveness.
80. Medical rehabilitation of patients with diabetes mellitus.
81. Application of non-drug methods during pregnancy and in the postpartum period.
82. Medical rehabilitation of patients with gynecological inflammatory diseases.
83. Medical rehabilitation of stroke patients.
List of presentation topics for section 2 (current control): Traditional methods of rehabilitation.
1. Acupuncture.
2. Herbal medicine.
3. Hypotherapy.
4. Dolphin therapy.
5. Music therapy.
6. Hirudotherapy.
7. Apitherapy.
8. Auriculotherapy.
9. Feline therapy and canistherapy.
10. Stone therapy.
11. Homeopathy.
12. Kumis therapy.
13. Enotherapy (wine treatment).
Topics of abstracts for section 2 (midterm control)
1. Basics of oriental medicine.
2. Integrative medicine is the medicine of the future.
3. Reflexology.
4. Traditional medicine of the West.
5. Traditional medicine of the East.
6. Art therapy.
7. Animal therapy.
8. Naturopathy.
9. Osteopathy.
10. Traditional medicine of Kyrgyzstan.
PLAN FOR PRESENTATION AND ABSTRACT:
1. Definition. History.
2. The mechanism of therapeutic action.
3. Features (advantages, advantages and disadvantages).
4. Indications and contraindications.
5. List of used literature.

Requirements for the presentation and abstracts in the guidelines in paragraph 8.
Situational tasks for current and intermediate control in ANNEX 1
An example of solving a situational task
Task. A 18-year-old patient complains of "hungry" and "night" pains in the epigastric region, heartburn, sour eructation, occasionally nausea. The appetite is saved. Disturbed by irritability, weakness. The above complaints appeared for about 4 months. In the last month, I began to notice dizziness, especially with a change in body position, the weakness increased. Notes the pallor of the skin. From the anamnesis: "like everyone else" ate irregularly, dry food, periodically noted pain in the stomach, but did not go to the doctor. Objectively: slightly reduced nutrition. The skin and mucous membranes are pale, clean. No pathology was revealed on the part of the lungs and heart. Tongue moist, slightly coated with white bloom. The abdomen is painful on palpation in the epigastrium, there is also a slight muscle tension, a positive Mendel's symptom. The liver is not enlarged, the symptoms of cholecystitis are negative. Stool - a tendency to constipation.
Questions:
1. What disease is the patient talking about?
2. What are the additional studies needed to clarify the diagnosis?
3. Make a plan of rehabilitation measures.
4. Is it possible to prescribe physiotherapy and exercise therapy in combination with medicines?
5. What methods of physiotherapy are shown to a patient with this disease?
6. Does the patient need a sanatorium-resort stage of rehabilitation?
Answers to the problem:

1. Peptic ulcer of 12 duodenal ulcer in the acute phase. Gastric bleeding? Iron-deficiency anemia?
2. Complete blood count, blood for serum iron, esophagogastroduodenoscopy with histological examination for Helicobacter pylori, feces for occult blood (Weber).
3. Now the patient needs a stationary stage of rehabilitation, which includes an adequate movement regimen, diet therapy, drug treatment, physiotherapy, exercise therapy. At the outpatient stage - observation of a therapist, if necessary, consultation of a gastroenterologist, twice a year (autumn, spring) anti-relapse treatment with the inclusion of rehabilitation of chronic foci of infection. An examination by a dentist and an ENT doctor is mandatory. The sanatorium-resort stage of rehabilitation is indicated during the period of remission of the disease.
4. Contraindications for exercise therapy and physiotherapy are complications of peptic ulcer disease (perforation, penetration and malignancy of the ulcer), including bleeding. In case of a large ulcer defect and the presence of occult blood in the feces, it is not recommended to influence the epigastric region. Electrophoresis of novocaine, vitamin B1, dalargin is prescribed by the endonasal reflex technique. Exercise therapy is prescribed 5-8 days after the cessation of pain, the presence of an ulcer defect is not a contraindication for physical exercise, only exercises that increase intra-abdominal pressure are excluded from the complex.
5. In the absence of complications, sharp pains and pronounced dyspeptic syndrome, electrophoresis of painkillers, antispasmodics, ganglion blockers, zinc, biostimulants on the epigastric region is prescribed transversely. Intragastric (interstitial) electrophoresis of oxacillin is more effective when the patient drinks 0.5 oxacillin in solution (or drinking 50 or 100 ml of water powder), after which transverse galvanization of the epigastric region is carried out and oxacillin is directly supplied from the inside to the gastric mucosa using direct current. UHF therapy or DV therapy is also prescribed to the stomach area in low-heat dosages for 10 minutes, every other day or daily, for a course of 10 procedures, magnetotherapy, ultrasound therapy or ultraphonophoresis of saline-coseril ointment.
6. Sanatorium treatment is indicated for peptic ulcer disease in the remission phase, a specialized resort of Jalal-Abad, but these patients can also be sent to other balneological resorts, for example, to the Yssykat resort, to receive complex treatment with mineral waters, mud procedures, diet therapy, apparatus physiotherapy , Exercise therapy, massage.
An example of test tasks for midterm control
1. How many stages of patient rehabilitation are there?
eleven
2. 2
3.3
4.4
5.5

2. What is not related to the social aspect of rehabilitation
1.the attitude of the individual to his disability
2.the relationship between the patient and the team to which he returns or comes for the first time
3.the role of state public organizations in determining the social status of a person
4. his intra-family relationship
5. research in the dynamics of the psychological and mental state of the patient and the conduct of psychological interventions.

3. What kind of burn can form if the rules for conducting the galvanization procedure under the cathode (negative pole) are violated?
1.thermal
2.chemical - alkali
3.chemical - acid
4.chemical - lead compounds
5.chemical - organic acids

4. How are electrodes applied to the patient's body during galvanization and electrophoresis?
1.directly onto bare skin
2.Contact through wet hydrophilic pad
3.through the air gap
4.through cotton clothing
5.through the ointment layer

5. What kind of current is used for drug electrophoresis?
1. Ultra high frequency alternating current
2. Ultra-high frequency alternating current
3. Permanent
4. Alternating current of extremely high frequency
5. Impulse current in non-driven mode

6. For what disease is drug electrophoresis contraindicated?
1.chronic hyperacid gastritis
2.bronchial asthma
3.atherosclerosis
4.rheumatoid arthritis
5.malignant tumor

7. How are the electrodes fixed on the patient's body during galvanization and drug electrophoresis?
1. Plastic holder
2. Superimposed without fixation
3. Held by the patient's hand
4. Held by the nurse's hand
5. Bandaging

8. For what diseases is it rational to use a Bergonier half mask during galvanization?
1.neuralgia of the trigeminal nerve
2.peptic ulcer
3.gynecological diseases
4.rheumatoid arthritis
5.chronic glomerulonephritis

9. What is the name of the apparatus for darsonvalization?
1. Amplipulse
2. Stream-1
3. Spark
4. Chamomile
5. Electric sleep

10. What does the patient feel during darsonvalization?
1. tingling
2.vibration
3.warm
4.cold
5.does not feel anything

11. What electrodes are used for ultratonotherapy?
1.glass
2.lead
3.wood
4.ceramic
5.plastics

12. With what method of electrotherapy electric discharges act on the patient's skin?
1.galvanization
2.diadynamic therapy
3.darsonvalization
4.inductothermy
5. UHF therapy

13. What electrodes are used for EP UHF therapy?
1.wood

2.lead
3.ceramic
4.plastics (capacitor)
5.Graphitized

14. What devices generate electromagnetic waves in the centimeter range?
1. Screen- 1
2. UHF-66
3. ICV - 4
4. Pole - 1
5. BEAM – 2

15. What arrangement of electrodes is used in the classical method of electrical sleep?
1.frontal-occipital
2.orbital-occipital
3.orbital-mastoid
4.on cervical sympathetic nodes
5.bitemporal

16. What is the name of the apparatus for electrical sleep?
1. Amplipulse
2. Stream-1
3. Spark
4. Chamomile
5. Electrosleep-4

17. What effect does diadynamic therapy have?
1.thermal
2.bactericidal
3.desensitizing
4.a pain reliever
5.vitamin-forming

18. How are electrodes applied to the patient's body during amplipulse therapy?
1.directly on the naked body
2.with air gap
3.With cotton dry cloth gap
4.Contact through a hydrophilic pad
5.through the oil layer

19. For what pathology is amplipulse therapy contraindicated?
1.thrombophlebitis
2.chronic cholecystitis
3. gastritis
4.hypertensive disease
5.enuresis

20. What is the name of the technique for introducing a medicinal substance using sinusoidal modulated currents?
1.drug electrophoresis
2.diadynamophoresis
3.fluctuophoresis
4. CV-foresis
5. UHF-phoresis

21. What range of optical radiation has a vitamin-forming effect?

1.infrared rays
2.visible red rays
3.Ultraviolet rays
4.visible yellow rays
5.All kinds of light radiation

22. What should be done in case of accidental overdose of erythema ultraviolet therapy?
1.Lubricate the irradiation site with petroleum jelly
2.wipe the irradiation site with alcohol
3. irradiate with a Sollux lamp
4.Put a cold lotion
5.Nothing to do

23. To what depth do infrared rays penetrate the body through the skin?
1.up to 1 mm
2.up to 20 cm
3.up to 5-7 cm
4.up to 3-4 cm
5.up to 1 cm

24. What is characteristic of infrared erythema?
1. clear boundaries
2.the appearance immediately after irradiation
3.appearance after a latency period
4. cyanosis of the skin
5. peeling after erythema subsides

25. How long does it take for infrared erythema to disappear?
1.after 2 hours
2.in 5-10 minutes
3.after 30-40 minutes
4.in 24 hours
5.After 3 days

26. What water procedures are short-term?
1.more than 30 minutes
2.10-30 minutes
3.2 min
4.more than 60 min
5.5min

27. For what disease is an intestinal shower contraindicated?
1.diabetes mellitus
2.diathesis
3.disorders of renal excretory function
4.chronic colitis
5.Inguinal hernia

28. How long after irradiation can the biodose be determined?
1.immediately after irradiation
2.after 30 min
3.in a day
4.After 3 days
5.after 7 days

29. For what disease are nitrogen baths contraindicated?
1.neurasthenia
2.small uterine fibroids
3.chronic salpingo-oophoritis
4.deforming osteoarthritis
5.atherosclerosis of the vessels of the extremities

30. What kind of soul has a pronounced mechanical effect?
1. Dusty
2. Needle
3. Ascending
4. Rain
5. Fan-shaped

31. What mineral waters are recommended for drinking in case of thyroid pathology?
1.nitrogen siliceous
2.carbon dioxide
3.iodides
4. water without "specific" components and properties
5.all of the above

32. What kind of dirt should be regenerated after the procedure?
1.after application to an open wound surface
2.after application to the ulcer surface
3. after appliques like "trousers"
4.after abdominal procedures
5.any dirt can be put into regeneration

33. What is a contraindication for prescribing mud applications?
1.adhesive process
2.the consequences of traumatic brain injury
3.Acute inflammatory processes
4.chronic pyelonephritis
5.deforming osteoarthritis

34. What is the indication for vaginal mud tampons?
1.vaginismus
2.tumors of the uterus
3. adhesions in the pelvic area
4.tumors of the appendages
5.Individual intolerance

35. What is the mechanical effect of dirt?
1.in irritation of the integument of the body with solid mud particles
2.in stimulating the function of the endocrine system
3.in an increase in cavity temperature
4.in irritation of the skin and mucous membranes by chemicals
5.in all listed actions

36. What mechanism of action does ozokeritotherapy have?
1.anesthetic
2.vitamin-forming
3.anti-inflammatory
4.absorbable
5. trophic

37. At what altitude above sea level is the resort considered a mid-mountain resort?
1.up to 500 m

2.from 500 to 1000 m
3.above 3000m
4.from 2000 to 3000 m
5.from 1000 to 2000 m

38. Which resort should not be sent to patients with the consequences of radiation exposure?
1. Cholpon-Ata
2. Issyk-Ata
3. Jety-Oguz
4. Jalal-Abad
5. Kyrgyzstan

39. What is aerotherapy
1.the method of traditional treatment with plants and their raw materials
2.the method of treatment and prevention using fresh air
3.treatment with mineral waters
4.treatment with the microclimate of caves, grottoes, salt mines, mines
5.exposure to sunlight on the human body for medicinal purposes

40. What is canistherapy?
1.the method of treatment and rehabilitation using specially selected and trained dogs
2.the method of treatment of acupuncture points
3.the method of treatment with leeches
4. massage with stones and minerals
5.the method of treatment with a fairy tale

Forms of current control of knowledge:
- a survey (oral or written),
- solving tests or situational tasks,
- defense of the abstract and presentation,
- assessment of practical skills

Final control form: differential credit.

5.4. List of Assessment Tools

Oral and written survey.
Test tasks.
Protection of the abstract.
Protection of the presentation.
Situational task solution.
Physiotherapy appointment.
Drawing up a complex of medical gymnastics.
Compilation of a complex of rehabilitation measures for this patient.
Differentiated credit with digital assessment of knowledge.
Assessment scales by types of assessment tools are in ANNEX 3.

6. COURSE (MODULE) METHODOLOGICAL AND INFORMATIONAL SUPPORT

6.1 Recommended Reading

6.1.1 Required Reading List

	Authors, Compliers	Title	Book publisher, Year
1	John DeLuca	Cognitive Rehabilitation and Neuroimaging: Examining the Evidence from Brain to Behavior	2020
2	Subhadra Nori Michelle Stern	Clinical Diagnosis in Physical Medicine &	2020

		Rehabilitation E-Book: Case by Case	
3	Amy Litterini	Physical Activity and Rehabilitation in Life-threatening Illness (Routledge Research in Physical Activity and Health)	2021
4	Glenn E Hedman	Rehabilitation Technology	2020

6.1.2 Advanced Reading

	Authors, Compliers	Title	Book publisher, Year
1	Leone Greene	Board Certification in Brain Injury Medicine	2025
2	Bryan J. O'Young	Physical Medicine and Rehabilitation Secrets	2023
3	Blessen C. Eapen	Spinal Cord Injury	2022
4	Christopher M. Hayre	Virtual Reality in Health and Rehabilitation (Rehabilitation Science in Practice Series)	2020
5	Pubudu N. Pathirana Saiyi Li Yee Siong Lee Trieu Pham	Human Motion Capture and Identification for Assistive Systems Design in Rehabilitation	2021
6	Daniel Horwitz	Hoppenfeld's Treatment and Rehabilitation of Fractures	2021

6.2 Online Resources

www.hsr-journal.com
www.crimsonpublishers.com
European journal of physical and rehabilitation medicine www.minervamedica.it
Electronic library of KRSU http://www.lib.krsu.edu.kg
Kyrgyz virtual scientific library www.kyrgyzstanvsl.org

6.3. List of Information and Education Technologies

Traditional educational technologies are technologies focused on the communication of knowledge and methods of action, transmitted to students in a finished form and intended for reproductive assimilation: lectures, seminars.

Innovative educational technologies - technologies aimed at the forced activity of the student and the formation of systemic thinking: discussions, role-playing games, analysis of situational tasks.

Information educational technologies - independent use of computer technology to develop the ability to work with information: reports, abstracts, presentations.

Information educational technologies - independent use of computer technology to develop the ability to work with information: reports, abstracts, presentations.

7. COURSE (MODULE) LOGISTICS	
	Lectures and practical classes are held on the basis of the Department of Medical Rehabilitation of KRSU. For conducting classes there are: a lecture hall for 100 seats, 3 study rooms, a gymnastics hall, as well as a computer, laptop and a multimedia installation.
	Also for the implementation of the educational process there is furniture: tables (6 pieces), chairs 8 (pieces), cupboards 2 (pieces), bookcase 3 (pieces), desks 20 (pieces), massage couches (4 pieces).)
	The department has posters and tables for all sections of general physiotherapy: for electrotherapy - 50 tables, for phototherapy and hydrotherapy - 30 tables. On physiotherapy exercises 20 posters and tables on physical exercises for various diseases.
	The physiotherapy department of the KRSU medical center, on the basis of which practical classes are conducted, has a massage room and a physiotherapy room equipped with the equipment necessary for training:
	Apparatus for galvanization and electrophoresis: Potok-1
	Apparatus for high-frequency electrotherapy: Iskra-1
	Apparatus for UHF therapy: UHF-66
	Apparatus for electro-pulse therapy: Tonus-2, Amplipulse-5, Electrosleep-4
	Ultrasound therapy apparatus: UZT-101
	Magnetic therapy device: Alimp
	Inhalation apparatus: Vulcan-3
	Irradiators for phototherapy: Sollux, electric light and thermal baths, UV irradiators: 4-tube, ORK-21, biodosimeter
	The department has created a small library for independent work of students, which contains the necessary literature on the course of medical rehabilitation. For better mastering of the course, the staff of the department published monographs, a textbook on physiotherapy and balneology, teaching aids on electrotherapy, light-, water-heat therapy, as well as photocopies of journal articles, lectures and reviews on medical rehabilitation. In addition, modern editions of educational literature are collected in the electronic library of the department.

8. COURSE (MODULE) PROFICIENCY METHODICAL GUIDELINES (FOR STUDENT)
Technological maps of the discipline in ANNEX 5 MODULAR DISCIPLINE CONTROL INCLUDES: 1. Current control: assimilation of educational material in classroom lessons (lectures, practical, including attendance and activity) and the fulfillment of mandatory tasks for independent work. 2. Mid-term control: checking the completeness of knowledge and skills on the material of the module as a whole. The implementation of modular control tasks is carried out in writing and is a mandatory component of modular control. 3. Intermediate control - a completed documented part of an academic discipline - a set of closely related credit modules. BASIC REQUIREMENTS FOR INTERMEDIATE CONTROL When showing up for differential credit, students are required to have with them grade books, which they present to the teacher at the beginning of the test. The teacher is given the right to put a differential. credit without a survey, for students who have scored more than 60 points for current and midterm control. Intermediate Control Assessment: - min 20 points - Questions to check the level of learning KNOW (when answering the questions, the student correctly formulates the basic concepts) - 25-30 points - Tasks to check the level of training to be able to and to OWN (if the student fully completes the test task). BASIC REQUIREMENTS FOR RUNNING CONTROL To understand the material and to master it qualitatively, the following sequence of actions is recommended: 1. After listening to the lecture and finishing the lessons, in preparation for the next day's lessons, you must first review and think about the text of the lecture.

2. During the week, choose a time to work with the recommended literature.
3. When preparing for the next day's practice sessions, you must first read the basic concepts and approaches on the homework topic. When performing an assignment, you must first understand what is required in it, what theoretical material you need to use, outline a solution plan.
4. To prepare for practical exercises and do independent work, you must first read the basic concepts and approaches on the topic of the assignment. It is recommended to use the discipline guidelines, lecture notes, recommended literature.
5. In preparation for intermediate and midterm controls, you need to study the theory: definitions of all concepts and approaches to assessment to the state of understanding the material and its independent presentation. When solving problems, it is always necessary to be able to qualitatively interpret the result of the solution.
6. Working off missed classes. Control over the assimilation of the material of the curriculum of the discipline by students is carried out systematically by the teacher of the department and is reflected in the teacher's journal in points. A student who has received an unsatisfactory mark on the current material is obliged to prepare this section and answer it to the teacher at an individual interview. In the case of a frontal survey, an unsatisfactory grade must be worked out within a month from the date of its receipt. The missed lecture should be worked out by the method of oral questioning by the lecturer and the preparation of an abstract based on the materials of the missed lecture within a month from the day of admission. Each practical lesson missed by a student is completed without fail.
The tests are carried out according to the schedule of the department, agreed with the dean's office.
Missed classes must be completed within 10 days from the day of admission, no more than one lesson per day is worked out. A student who has not completed the pass within the prescribed timeframe is allowed to the next classes only with the permission of the dean or his deputy in writing.
It is not allowed to suspend students who are poorly prepared for these classes from the next practical lesson.
For students who have missed practical classes due to a long illness, working off should be carried out after the permission of the dean's office according to an individual schedule agreed with the department.
In exceptional cases (participation in interuniversity conferences, competitions, Olympiads, duty, etc.), the dean and his deputy, in agreement with the department, may exempt students from working off some missed classes.
RECOMMENDATIONS FOR PLANNING AND ORGANIZING THE TIME REQUIRED FOR LEARNING THE DISCIPLINE
It is recommended to organize the time required to study the discipline as follows:
Study of the lecture notes the day before the practical lesson - 15-20 minutes.
Study of theoretical material according to the textbook and synopsis - 1 hour per week.
Preparation for a practical lesson - 2 hours.
In total a week - 3 hours 20 minutes.

RECOMMENDATIONS FOR THE ORGANIZATION OF INDEPENDENT WORK OF THE STUDENT
To understand the material and to master it qualitatively, the following sequence of actions is recommended:
1. When preparing for a practical lesson, the student needs to familiarize himself with the methodological development for the upcoming lesson (placed on the stand of the department).
2. Review the necessary material from the disciplines preceding the study.
3. In the lecture materials, main and additional literature, find answers to questions for self-preparation.
4. During the week, select a time (1 hour) to work with the recommended literature in the library.
RECOMMENDATIONS FOR INDEPENDENT OUTSIDE WORK OF STUDENTS ON THE STUDY OF THE DISCIPLINE
The study of the theoretical part of the discipline is designed not only to deepen and consolidate the knowledge gained in the classroom, but also to promote the development of students' creative skills, initiative and organization of their free time. The student's independent work in the study of the discipline includes:
- reading recommended literature, Internet sources and mastering the theoretical material of the discipline;
- preparation for various forms of control (situational task, control work, test tasks);
- preparation and writing of abstracts;
- preparation of answers to questions on the subjects of the discipline in the sequence in which they are presented.
It is best for students to plan the time required for studying disciplines for the entire semester, while providing for regular repetition of the material. The material outlined in the lectures must be regularly worked out and supplemented with information from other sources of literature presented not only in the discipline program, but also in periodicals. When studying the discipline, you first need to read the recommended literature on each topic and make a short summary of the main provisions, terms, information that requires memorization and are fundamental in this topic for mastering the subsequent topics of the course.
To expand knowledge of the discipline, it is recommended to use Internet resources; conduct searches in various

systems and use materials from sites recommended by the teacher. Reading additional literature is also desirable. When performing independent work on writing an essay, the student must: read the theoretical material in the recommended literature, periodicals, on Internet sites; creatively rework the studied material and present it for the report in the form of an abstract, illustrating it with diagrams, diagrams, photographs and drawings. The texts of the abstract should be presented in a clear, simple and clear language.

RECOMMENDATIONS FOR PREPARING A PRESENTATION

A multimedia presentation is a type of independent work of students to create visual information aids made with the help of a multimedia computer program PowerPoint. This type of work requires the coordination of the student's skills in collecting, systematizing, processing information, formatting it in the form of a collection of materials that briefly reflect the main issues of the topic being studied, in electronic form.

That is, the creation of presentation materials expands the methods and tools for processing and presenting educational information, forms students' computer skills. The presentations are prepared by the student in the form of slides using Microsoft PowerPoint software. The role of the student: to study the materials of the topic, highlighting the main and the secondary; establish a logical relationship between theme elements; present the characteristics of the elements in a concise form; select reference signals to emphasize the main information and display in the structure of the work; formalize the work and provide it by the deadline.

Structure of the presentation: You can keep the active attention of the audience for no more than 15 minutes, and therefore, with an average calculation of the viewing time - 1 minute per slide, the number of slides should not exceed 15. The first slide of the presentation should contain the topic of the work, the surname, name and patronymic of the performer, the number of the study group, as well as the surname, name, patronymic, position and academic degree of the teacher. On the second slide it is advisable to present the purpose and summary of the presentation. The following slides should be divided into sections according to the points of the work plan. On the final slide, the most important thing, the main thing from the content of the presentation, is brought.

Recommendations for presentation design in Microsoft PowerPoint: For visual perception, the text on presentation slides must be at least 18 pt, and for headings - at least 24 pt. The presentation layout should be designed in strict colors. The background should not be too bright or colorful. The text should be readable. The same elements on different slides must be the same color. The space of the slide (screen) should be used as much as possible, for example, by increasing the scale of the picture. In addition, the top ¾ of the slide (screen) should be taken up whenever possible, since the bottom of the screen is difficult to see from the last rows.

Each slide must contain a title. There is no full stop at the end of headings. The headings should reflect the conclusion from the information presented on the slide. Capitalizing headings should only be used if they are short. The slide should contain no more than 5-6 lines and no more than 5-7 words in a sentence. The text on the slides should be easy to read. When adding pictures, diagrams, diagrams, screenshots (screenshots), it is necessary to check the text of these elements for errors. Do not overload slides with animation effects - this distracts listeners from the semantic content of the slide. Use the same animation effect to change slides.

Criteria for evaluation:

- correspondence of the content to the topic;
- correct structuring of information;
- the presence of a logical connection of the stated information;
- aesthetics of design, its compliance with requirements;
- the work was submitted on time.

RECOMMENDATIONS FOR ABSTRACT WRITING

1. The topic of the essay is selected by agreement with the teacher. It is important that in the abstract: firstly, both scientific and social aspects of the problem are highlighted; secondly, both general theoretical provisions and specific examples are presented.
2. The abstract should be based on the study of several additional sources to the main literature (monographs, articles).
3. The outline of the abstract must be copyrighted (agreed with the teacher). It reveals the author's approach, his opinion, analysis, problems, as a rule, these are special monographs or articles. It is also recommended to use popular scientific journals as additional literature: "Bulletin of KRSU", "Healthcare of Kyrgyzstan", "Bulletin of KSMA", "Traditional medicine", "Questions of balneology, physiotherapy and exercise therapy".
4. All facts and borrowed considerations given in the abstract must be accompanied by references to the source of information.
5. It is unacceptable to simply compose an abstract from pieces of a borrowed text. All citations must be presented in quotation marks, indicating the source and page in parentheses. The absence of quotation marks and references constitutes plagiarism and, in accordance with established scientific ethics, is considered a gross violation of copyright.

Requirements for abstract design:

The volume of the abstract can range from 10-15 printed pages.
Main sections: table of contents (plan), introduction, main content, conclusion, list of references. The text of the abstract should contain the following sections: - title page indicating: the name of the university, department, topic of the abstract, full name of the author and full name of the teacher, introduction, relevance of the topic. main section. conclusion (analysis of the results of literary search); conclusions. bibliographic description, including Internet sources. the list of literary sources must have at least 10 bibliographic titles, including online resources.
The textual part of the abstract is drawn up on a sheet of the following format: top margin - 2 cm; left indent - 3 cm; indent on the right - 1.5 cm; bottom margin - 2.5 cm; - text font: TimesNewRoman, font height - 14, space - 1.5; page numbering - at the bottom of the sheet. There is no number on the first page. The essay must be completed correctly in accordance with the culture of presentation. There must be references to the literature used, including periodicals for the last 5 years.

Evaluation criteria for the abstract:
- Relevance of the research topic;
- correspondence of the content to the topic;
- depth of study of the material;
- the correctness and completeness of the development of the questions raised;
- the significance of the conclusions for further practical activities;
- the correctness and completeness of the use of literature;
- compliance of the abstract design with the standard;
- the quality of the message and answers to questions when defending the abstract.

RECOMMENDATIONS FOR REGISTRATION OF PHYSIOTHERAPEUTIC PURPOSE
To acquaint the student with the form of the physiotherapy prescription (form No. 044 / y). This form is the same for all medical professional institutions and is filled out by a specialist physiotherapist.
Medical student must be able to use physical methods of rehabilitation in his practice. Therefore, he should be able to arrange a physiotherapy appointment according to the following scheme:
1. Choose the appropriate method of physiotherapy for the patient.
2. Indicate the method of exposure (local, reflex-segmental, general).
3. Specify the dosage (patient's sensations during the procedure, the number of procedures per course).
4. List the contraindications for this method.

RECOMMENDATIONS FOR THE CONSTRUCTION OF A GYMNASTICS COMPLEX
(Homework for section 3)
When completing a written homework assignment, you must first understand the basic rules for building a complex of medical gymnastics. It is recommended to use methodological instructions on the discipline, lecture notes. A student on a separate sheet of A4 paper must build a complex of therapeutic exercises for this patient (the patient's diagnosis is determined by the topic of the lesson). When building a complex of medical gymnastics, a student must first determine the goal and objectives of the medical complex, deal with the choice of necessary physical exercises. The dosage should be adequate to the condition of the patient, a combination of general strengthening and special exercises is required. When building a complex, it is necessary to take into account the principle of gradualness and sequence of increasing physical activity. Design a complex of medical g1. List the types of special exercises aimed at restoring disturbed body functions.
2. Indicate the dosage of physical activity (methodology, pace of exercise, the number of repetitions of exercises and the duration of the session).
3. Determine the contraindications to the appointment.ymnastics according to the following scheme.

RECOMMENDATIONS FOR COMPOSING A COMPLEX OF REHABILITATION MEASURES
When compiling a complex of rehabilitation measures, it is necessary to read the theoretical material in the recommended basic and additional literature, the material of the lecture. In class, the student is given a card with the diagnosis of a particular patient. On a separate sheet of A4 paper, the student must draw up a complex of rehabilitation measures for this patient and justify his choice of medical rehabilitation means.
1. Determine the stages of rehabilitation.
2. Regime and diet therapy.
3. Necessary medical treatment.
4. Methods of physiotherapy.
5. Recommendations for spa treatment.
6. Traditional methods of rehabilitation.
7. Means and forms of physiotherapy exercises.

8. Determine the contraindications to the appointment of exercise therapy.

ANNEX 4

When assessing the oral responses to the KNOWLEDGE level test, the following criteria are taken into account:

0-59% - an unsystematic, fragmentary, superficial answer was given, indicating a lack of understanding of the essence of the question or refusal to answer. Lack of consistency and consistency. Serious errors were made in the content of the answer;

60-69% - an incomplete and insufficiently detailed answer was given. The logic and consistency of presentation have violations. The skills of analysis, the ability to express one's opinion on the problem under discussion and the use of special terms are poorly formed. Additional literature and lecture material were not used. More than two mistakes were made in the content of the answer;

76-84% - given a complete, detailed answer to the questions posed, revealing solid knowledge of the topic. Used materials of lectures and main literature with examples. The ability to highlight essential and non-essential features is shown. The answer is clearly structured, consistent and logical, but one or two inaccuracies in the answer or minor mistakes were made;

85-100% - a reasoned, detailed answer was given with the inclusion of material from the main, additional literature and lectures, testifying to a solid knowledge of the subject. Examples are given with the expression of their opinion on the problem under discussion. The answer traces a clear structure, a logical sequence of the essence of the concepts and terms being disclosed.

When assessing the solution of situational tasks, the following criteria are taken into account:

0-59% - the solution to the problem is completely incorrect, incomplete and inconsistent, with gross errors, without theoretical justification. Refusal to solve the proposed problem;

60-69% - the solution to the problem is fragmentary: insufficiently complete, inconsistent, with errors, weak theoretical justification. The choice of tactics of action is possible with leading questions of the teacher;

70-84% - correct and complete solution of the situational problem. The correct choice of tactics of action. Minor difficulty in answering. Rationale for theoretical questions with additional comments from the teacher;

85-100% -solution of a situational problem is quite convincing. The correct and reasonable choice of tactics of action with an exact reference to the material studied.

When evaluating a physiotherapeutic appointment to check the level of training to SKILLS , the following criteria are taken into account:

0-59% - the sequence of the algorithm of practical skills has not been completed or the task has been refused;

60-69% - partial implementation of the sequence of the algorithm of practical skills. Errors were made that are corrected by the teacher;

70-84% - correct execution of the entire sequence of the algorithm of practical skills with theoretical justification. Some inaccuracies (minor errors) were made, which were independently discovered and corrected;

85-100% - independent correct implementation of the entire sequence of the algorithm of practical skills, with theoretical justification.

When evaluating the writing of an abstract, the following criteria are taken into account:

	No answer 0%	Minimum answer 31-59%	Outlined, Revealed Answer 60-69%	Completed answer 70-84%	Exemplary answer 85-100%	Mark (at%)
Disclosure of the topic		The topic is not disclosed, there are no conclusions	The topic is not fully disclosed. Conclusions are not drawn or conclusions are not substantiated .	The topic is disclosed. The analysis of the problem is carried out without involving additional literature. Not all conclusions have been drawn or substantiated .	The topic is fully disclosed. The analysis of the problem with the involvement of additional literature is carried out. All conclusions have been drawn.	
Performance		The information presented is not logically connected. No professiona l terms	The information presented is not systematized and not consistent. 1-2 professional	The information presented is systematized and consistent. More than 2 professional	The information presented is systematized, consistent and logically connected. Used	

		used	terms used	terms used	more than 5 professional terms	
Registration		The conditions for completing the abstract are not met. More than 4 errors in the information provided	3-4 errors in the information provided	No more than 2 errors in the presented information tions	There are no errors in the information presented. tions	
Answers on questions		No answers to questions	Only answers to basic questions	Answers to questions full or partially complete	Answers to the questions are complete with examples and explanations	
Final grade		Unsatisfactory	Satisfactorily	Good	Excellent	

Less than 60%: the topic of the abstract has not been disclosed, there is a significant lack of understanding of the problem or the abstract has not been submitted;

60-69%: the topic is partially covered. The information provided is inconsistent. Factual errors were made in the content of the abstract, there are no conclusions. There are omissions in the design, there is no culture of presentation, there are stylistic errors;

70-84%: the information presented in the abstract is fully consistent with the topic, logically systematized, but there are inaccuracies in the presentation of the material and our own conclusions. The basic requirements for the abstract and its defense are met. The material is presented without grammatical and stylistic errors;

85-100%: the topic is fully disclosed, a brief analysis of various points of view on the problem under consideration is made, conclusions are formulated. All the requirements for writing and protecting the abstract are met: the volume is maintained, the requirements for the external design are met, there are no grammatical and stylistic errors. The information in the abstract is presented competently, comprehensively, reflects the student's complete knowledge of the material.

When evaluating a presentation with a report, the following criteria are taken into account:

	No answer	Minimum	Outlined, Revealed	Completed answer	Exemplary answer	Mark

	0%	answer 31-59%	Answer 60-69%	70-84%	85-100%	(at%)
Disclosure of the topic		The topic is not disclosed, there are no conclusions	The topic is not fully disclosed. Conclusions are not drawn or conclusions are not substantiated.	The topic is disclosed. The analysis of the problem is carried out without involving additional literature. Not all conclusions have been drawn or substantiated.	The topic is fully disclosed. The analysis of the problem with the involvement of additional literature is carried out. All conclusions have been drawn.	
Performance		The information presented is not logically connected. No professional terms used	Submitted Information is not systematic zized and not consistent. Used 1-2 professional natural terms	The information presented is systematized and consistent. More than 2 professional terms used	Represent-information is systematized, sequenced it is logical and logically connected. Used more than 5 professional terms	
Registration		Information technology (PowerPoint) is not used. More than 4 errors in the information presented	Information technologies (PowerPoint) were used partially, 3-4 errors in the presented information tions	Used information technology (PowerPoint)., More than 2 errors in the presented information tions	Information technology (PowerPoint)., there are no errors in the information tions	
Answers on questions		No answers to questions	Only answers to basic questions	Answers to questions full or partially complete	Answers to the questions are complete with examples and explanations	
Final grade		Unsatisfactory	Satisfactorily	Good	Excellent	

0-60% - the topic is not disclosed, there are no conclusions, the information is not logically connected, the terms of registration are not met, there are many mistakes;

60-75% - the topic is not fully disclosed, the conclusions are not substantiated, the information is not systematized and not consistent, the terms of registration are partially met, there are errors;

76-84% - the topic has been disclosed, an analysis has been carried out, not all conclusions are justified, the information is systematized and consistent, the conditions for registration are met, there are minor errors;

85-100% - the topic is fully disclosed, conclusions are drawn, the information is systematized and consistent, logically connected, the terms of registration are met, there are no errors.

When assessing the skills of building a complex of medical gymnastics, the following criteria are taken into account:

0-60% - the sequence of the algorithm of practical skills has not been completed or the task has been refused;

60-75% - partial implementation of the sequence of the algorithm of practical skills, mistakes were made that are corrected by the teacher;

76-84% - correct implementation of the entire sequence of the algorithm of practical skills with theoretical justification, some minor errors were made that were independently detected and corrected;

85-100% - independent correct implementation of the entire sequence of the algorithm of practical skills, with theoretical justification.

When assessing the compilation of a complex of rehabilitation measures, the following criteria are taken into account:

0-60% - the rehabilitation complex is not drawn up or is carelessly decorated;

60-75% - incomplete partial implementation of the sequence of the scheme, makes mistakes, corrects when corrected by the teacher;

76-84% - correct compilation of a complex of rehabilitation measures with theoretical justification, makes minor mistakes that he independently detects and corrects;

85-100% - a clear and complete compilation of a complex of rehabilitation measures according to the presented scheme, with theoretical justification.

ANNEX 5

Situational tasks for section 1 "General physiotherapy"

1. A patient has chronic gastritis with decreased gastric secretory function. Complaints: severity and aching pain in the epigastric region, arising after eating. The purpose of physiotherapy: relief of pain, inflammation, improvement of trophism. Prescribe physiotherapy treatments.

2. A patient has stage II hypertension. Complaints: recurrent headache, dizziness against the background of high blood pressure. The purpose of physiotherapy: antihypertensive and sedative effects. Prescribe physiotherapy treatments.

3. A patient has trigeminal neuralgia. Complaints: paroxysmal pain in the left side of the face, appearing in cold windy weather. The goal of physiotherapy is pain relief. Prescribe physiotherapy treatments.

4. A patient has acute bronchitis in the stage of fading exacerbation. 8th day of illness. Complaints: weakness, rare cough with a small amount of serous sputum, in the lungs auscultation - single dry wheezing. The purpose of physiotherapy: anti-inflammatory, desensitizing, broncho-spastic effect. Prescribe physiotherapy treatments.

5. The patient has an infected wound of the left forearm. Symptoms: swelling, pain, purulent discharge from the wound. The purpose of physiotherapy: antibacterial action, removal of edema. Prescribe physiotherapy treatments.

6. The patient has mixed neurocirculatory dystonia. Complaints: headache, heaviness in the left side of the chest, irritability, sleep disturbance. Prescribe physiotherapy treatments.

7. A patient has bronchial asthma, an exogenous form in the stage of incomplete remission. Complaints: rare attacks of suffocation, rare dry cough, anxiety, sleep disturbance. Prescribe physiotherapy treatments.

8. The patient has atherosclerosis of the vessels of the brain. Complaints: decreased performance, absent-mindedness, poor sleep, headache, memory loss. The purpose of physiotherapy: tonic-catabolic effect. Prescribe physiotherapy treatments.

9. A patient has stage II hypertension. Complaints: back pain, dizziness, tinnitus, loss of coordination. BP 160/100 mm Hg The purpose of physiotherapy: sedative and antihypertensive effect. Prescribe physiotherapy treatments.

10. A patient has ulnar nerve neuritis. Complaints: pain along the elbow edge of the left forearm. The goal of physiotherapy is pain relief. Prescribe physiotherapy treatments.

11. After prolonged immobilization of the limb with a fracture of the femur, the patient developed atrophy of the thigh muscles. The purpose of physiotherapy: electrical stimulation of the muscles of the left thigh to eliminate atrophy. Prescribe physiotherapy treatments.

12. The patient has radicular manifestations of osteochondrosis of the cervical spine. Complaints: pain in the upper half of the neck on the left when turning the head. The goal of physiotherapy is pain relief. Prescribe physiotherapy treatments.

13. A patient has arthritis of the knee joint, subacute stage. Complaints: pain in the left knee joint during movement, moderate swelling of the joint. The goal of physiotherapy is to relieve pain, relieve swelling. Prescribe physiotherapy treatments.

14. A patient has eczema of the right forearm. Complaints: local skin itching. The goal of physiotherapy is to reduce itching, improve skin trophism. Prescribe physiotherapy treatments.

15. The patient has a sluggish wound of the left leg. Objective data: long-term non-healing skin wound with a diameter of 3.5 cm; sluggish growth of granulation tissue, which has a grayish color, with microbiological examination - the growth of coccal flora. The purpose of physiotherapy: improving trophism, stimulating regeneration, bactericidal action. Prescribe physiotherapy treatments.

16. A patient has post-injection infiltration of the right buttock. Objective data: induration in the area of the right buttock, slightly painful on palpation. The purpose of physiotherapy: resorption of the infiltrate. Prescribe physiotherapy treatments.

17. A patient has osteochondrosis of the cervical spine. Complaints: pain in the neck when turning the head. The goal of physiotherapy is pain relief. Prescribe physiotherapy treatments.

18. The patient has a spur of the left heel bone. Complaints: acute pain when walking in the area of the left heel. The goal of physiotherapy is pain relief. Prescribe physiotherapy treatments.

19. A patient has cicatricial contracture of the postoperative suture area on the anterior abdominal wall (1.5 months after surgery). Complaints: soreness in the area of contracture on palpation, pulling pain in the lower abdomen. The goal of physiotherapy: resorption of scar tissue. Prescribe physiotherapy treatments.

20. A patient has peptic ulcer in the stage of incomplete remission (ulcer of the lesser curvature of the stomach). Complaints: recurrent pain in the upper abdomen after eating. Fibrogastroscopy: sluggishly epithelizing ulcerative defect (0.4 x 0.3 cm). The goal of physiotherapy is to improve the local blood flow of the affected area and tissue metabolism. Prescribe physiotherapy treatments.

21. A patient has cervical myositis. Complaints: pain in the neck that occurs after hypothermia. Objective data: limited mobility in the neck, pain on palpation of the cervical muscles. The purpose of physiotherapy: anti-inflammatory and analgesic action. Prescribe physiotherapy treatments.

22. The patient has a burn of the right lower leg of the II degree, a sluggish epithelial wound. Objective data: the wound surface with an area of 5x5 cm, flaccid granulation along the edges. The purpose of physiotherapy: anti-inflammatory effect, stimulation of regenerative processes. Prescribe physiotherapy treatments.

23. A patient has D-hypovitaminosis. Complaints: increased fatigue, poor sleep. Objective data: paresthesias, dry skin with a grayish tinge, dental caries, hand tremors. The purpose of physiotherapy: stimulation of the formation of vitamin D3 in the skin, normalization of phosphorus-calcium metabolism. Prescribe physiotherapy treatments.

24. A patient has acute right-sided pneumonia. Complaints: severe cough, pain in the chest when coughing on the right, mucous sputum. Objective data: respiratory rate 24 in 1 min, moist fine bubbling rales on the right, temperature 37.5 ºC. The purpose of physiotherapy: anti-inflammatory effect, increasing the body's nonspecific resistance. Prescribe physiotherapy treatments.

25. A patient has lumbosacral sciatica. Complaints: pain in the lumbosacral region. Objective data: pain on palpation of the paravertebral points in the lumbosacral spine. The goal of physiotherapy is to relieve pain. Prescribe physiotherapy treatments.

26. A patient has furunculosis in the area of the right axillary fossa (3 boils). The purpose of physiotherapy: anti-inflammatory and analgesic action. Prescribe physiotherapy treatments.

27. The patient has lacunar tonsillitis. Complaints: sore throat, worse when swallowing. Objective data: pulse 90 beats per minute, with pharyngoscopy - pronounced hyperemia and swelling of the palatine tonsils, body temperature 37.8 ° C. The purpose of physiotherapy: bactericidal, anti-inflammatory effect. Prescribe physiotherapy treatments.

28. A patient has deforming osteoarthritis of the right knee joint. Complaints: pain in the right knee joint, worse with exertion and at the end of the day. Objective data: the patient is obese, deformity of the knee joint, tenderness on palpation. The purpose of physiotherapy: analgesic, anti-inflammatory effect, improving metabolism in connective tissue. Prescribe physiotherapy treatments.

29. A patient has arthrosis of the left shoulder joint. Complaints: pain in the joint area, limitation of mobility. The goal of physiotherapy is to relieve pain, improve metabolism, blood supply to the joint. Prescribe physiotherapy treatments.

30. A patient has acute gastritis. Complaints: loss of appetite, feeling of fullness and pressure in the epigastric region, nausea, recurrent vomiting after eating, heartburn. On palpation - pain in the epigastric region. The purpose of physiotherapy: anti-inflammatory, analgesic effect, restoration of motor and secretory functions of the stomach. Prescribe physiotherapy treatments.

31. A patient has a rupture of the ligaments of the right ankle joint, a violation of its function. The goal of physiotherapy is to relieve pain and swelling. Prescribe physiotherapy treatments.

32. A patient has mixed neurocirculatory dystonia (NCD). Complaints: headache, irritability, irascibility, insomnia, periodic rises in blood pressure, sometimes discomfort in the heart. The purpose of physiotherapy: to normalize blood pressure, improve sleep, improve blood circulation. Prescribe physiotherapy treatments.

33. The patient has hypotension. Complaints: decreased performance and memory, general weakness, recurrent dizziness, pallor of the skin, decreased blood pressure (blood pressure below 100/60 mm Hg). The purpose of physiotherapy: general strengthening effect, normalization of the central regulation of vascular tone (strengthening of excitatory and weakening of inhibitory processes). Prescribe physiotherapy treatments.

34. A patient has neurasthenia (hypersthenic form). Complaints: irritability, disturbed sleep, attention, dizziness. The purpose of physiotherapy: sedative effect, normalize sleep, strengthen the general condition of the body. Prescribe physiotherapy treatments.

35. A patient has mitral heart disease without circulatory failure. The purpose of physiotherapy: cardiotonic action, strengthening the contractile function of the myocardium. Prescribe physiotherapy treatments.

36. A patient has chronic spastic colitis. Complaints: recurrent abdominal pain, constipation. The purpose of physiotherapy: relief of colon spasm, normalization of the stool. Prescribe physiotherapy treatments.

37. A patient has gout. Complaints: paroxysmal pain in the first toe, often after a diet disorder. The purpose of physiotherapy: normalization of purine metabolism, elimination of uric acid from the body. Prescribe physiotherapy treatments.

38. A patient has post-hemorrhagic chronic iron deficiency anemia. The purpose of the spa treatment is to enhance erythropoiesis. Prescribe physiotherapy treatments.

Situational tasks for section 3: "Physiotherapy exercises for diseases"

1. Patient 58 years old. For 10 years, recurrent pain in the region of the heart has been troubling. Diagnosis: CHD, exertional angina, FC 2. In addition, he complains of pain in the knee and shoulder joints when moving, changing the weather. On radiographs of the joints, the phenomenon of deforming osteoarthritis. What forms of physiotherapy exercises can be used? Is spa treatment indicated and at which resort?

2. Patient, 76 years old, with a diaphyseal fracture of the left hip, the second week lies in traction. What methods of exercise therapy are maximally possible in relation to the patient?

3. The patient, 24 years old, was in the hospital with a diagnosis of Compression fracture of the vertebral bodies in the lumbar spine. A course of posture treatment and physical exercises was carried out, with a good effect. The patient is discharged under the supervision of a polyclinic doctor. What form of exercise therapy can be recommended for this patient?

4. A 28-year-old patient was actively involved in playing sports, received a concomitant injury during an accident, is in a trauma hospital for 12 days. What will limit the intensity and duration of physical exercises for this patient?

5. Patient, 58 years old, was admitted with a diagnosis of Acute cerebrovascular accident of hemorrhagic type. After 6 days of stay in intensive care, the patient was transferred to the neurological department. What methods of exercise therapy are maximally possible in relation to the patient?

6. The patient, 69 years old, is on the 7th day in the neurological department with a diagnosis of repeated acute cerebrovascular accident in the basin of the left middle cerebral artery. On examination: body temperature 39 C, cough with difficult to separate purulent sputum. In the analysis of blood: a shift of the leukocyte formula to the left, ESR - 46 mm / hour. Determine the reasons limiting the amount of prescription of remedies for exercise therapy, in relation to this patient

7. A 72-year-old patient was being treated in the neurological department with a diagnosis of ischemic stroke in the basin of the right middle cerebral artery. A course of treatment with physical exercises (15 procedures) was carried out, with a good effect. The patient is discharged under the supervision of a polyclinic doctor. What form of exercise therapy can be recommended for this patient?

8. The patient is 36 years old. Diagnosis - hypertension stage 1, mainly cerebral form. Prescribe physiotherapy treatments. What forms of physiotherapy exercises can be used? Is spa treatment indicated and at which resort?

9. Patient 30 years old. Diagnosis - neurasthenia, hypersthenic form. What means of medical rehabilitation can be prescribed in this case? Justify the choice of proposed methods.

10. Patient 55 years old. Diagnosis - deforming arthritis of the right knee joint. Prescribe physiotherapy treatments. What forms of physiotherapy exercises can be used? Is spa treatment indicated and at which resort?

11. Patient 30 years old. Diagnosis - chronic left-sided pneumonia. What means of medical rehabilitation can be prescribed in this case? Justify the choice of the proposed methods. Determine contraindications for the proposed methods.

12. Patient 40 years old. Diagnosis - chronic colitis with an atonic component. Prescribe physiotherapy treatments. What forms of physiotherapy exercises can be used? Is spa treatment indicated and at which resort?

13. Patient 35 years old. The diagnosis is a functional disorder of the nervous system. Prescribe physiotherapy treatments. Justify the choice of the proposed methods. Determine the indications and contraindications for the proposed methods.

14. Patient 30 years old. Diagnosis - intercostal nerve neuralgia. What means of medical rehabilitation can be prescribed in this case? Justify the choice of the proposed methods. Determine contraindications for the proposed methods.

15. Patient 45 years old. Diagnosis - osteochondrosis of the cervical spine. Prescribe physiotherapy treatments. What forms of physiotherapy exercises can be used? Is spa treatment indicated?

16. Patient 47 years old. Diagnosis - osteochondrosis of the lumbosacral spine. What means of medical rehabilitation can be prescribed in this case? Justify the choice of the proposed methods. Determine the indications and contraindications for the proposed methods.

17. The patient is 18 years old. The diagnosis was neuralgia of the intercostal nerves on the left. Prescribe physiotherapy treatments. Justify the choice of the proposed methods. Determine contraindications for the proposed methods.

18. Patient 35 years old. The diagnosis is hemorrhoids. Prescribe physiotherapy treatments. Justify the choice of the proposed methods. Determine contraindications for the proposed methods.

19. The patient is 20 years old. Diagnosis - acute left-sided otitis media. What means of medical rehabilitation can be prescribed in this case? Justify the choice of the proposed methods.

20. Patient 30 years old. The diagnosis is a neck furuncle in the infiltration stage. Prescribe physiotherapy treatments. Justify the choice of the proposed methods. Determine contraindications for the proposed methods.

21. Patient 25 years old. Diagnosis - duodenal ulcer in remission. What physiotherapy in combination with drug therapy can be prescribed to the patient? Decide on the issue of spa treatment. Determine the indications and contraindications for the proposed methods.

22. The patient is 30 years old. Diagnosis - neuritis of the facial nerve. What methods of physiotherapy can be prescribed and in what time frame? Determine the indications and contraindications for exercise therapy.

The planning sheet of discipline

Discipline Medical rehabilitation
Field of study/specialization General medicine
Course/semester 6,11
Credit units (CU) 3

Title of module according to WPD	Type of control	Forms of control	Minimal credit points	Maximal credit points	Week of control
Module 1					
Module 1. General physiotherapy	Formative assessment	Interview, solving situational tasks, practical skills (registration of physiotherapeutic purposes), essay. Skipping lectures or practice sessions minus 1 point	10	15	7 week
	Midterm examination	Evaluation test	5	10	
Module 2					
Module 2. Traditional treatments	Formative assessment	Interview, presentation. Skipping lectures or practical training minus 1 point	5	10	9 week
	Midterm examination	Report	5	10	
Module 3					
Module 3. Physical exercises for diseases	Formative assessment	Survey, solving situational problems, practical skills (building a complex of medical gymnastics), essay. Skipping lectures or practice sessions minus 1 point, compendium lectures plus 1 point, participation in research work plus 1 point	5	15	18 week
	Midterm examination	Test tasks, drawing up a complex of rehabilitation measures			
Total			40	70	
Midpoint assessment			20	30	
Summative assessment			60	100	